



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/090,179

03/04/2002

Steven R. Lindsey

2917.DHCL.PT

4746

26986

7590

07/24/2008

MORRISS OBRYANT COMPAGNI, P.C.

734 EAST 200 SOUTH

SALT LAKE CITY, UT 84102

EXAMINER

MURPHY, RHONDA L

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

07/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/090,179	Applicant(s) LINDSEY ET AL.	
	Examiner RHONDA MURPHY	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on 3/17/08. Accordingly, claims 1-14 have been canceled and claims 15-31 are currently pending in this application.

Response to Arguments

1. Applicant's arguments with respect to claims 15-31 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
2. Claims 1-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
3. Claim 15, lines 4-5 recite "without transmission through an intermediate central hub". This limitation was not described in the specification and is considered new subject matter.

Art Unit: 2616

4. Claim 23, lines 7-8 recite "without transmission through an intermediate central hub". This limitation was not described in the specification and is considered new subject matter.

5. Claim 28, lines 9-10 recite "without transmission through an intermediate central hub". This limitation was not described in the specification and is considered new subject matter.

6. Dependent claims 16-22, 24-27, and 29-31 are also rejected as being dependent upon rejected claims 15, 23 and 28.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 15, 22, 27, 28 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 15 recites the limitation "digital media transceiver" in line 7. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 22 contains the trademark/trade name Dolby Digital™ and Digital Theatre Systems™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A

trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe CD quality streaming digital audio signals and, accordingly, the identification/description is indefinite.

11. Claim 27 contains the trademark/trade name Dolby Digital™ and Digital Theatre Systems™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe CD quality streaming digital audio signals and, accordingly, the identification/description is indefinite.

12. Claim 31 contains the trademark/trade name Dolby Digital™ and Digital Theatre Systems™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A

trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe CD quality streaming digital audio signals and, accordingly, the identification/description is indefinite.

13. Claim 28 describes a method claim comprising “a digital audio bus” and “a control bus”, without providing any steps.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

16. Claims 15 – 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakatani (US 2003/0056003 A1) in view of Tomassetti et al. (US 6,907,458).

Regarding claims 15 and 23, Nakatani teaches a digital audio network station (*Fig. 7, "300" and Fig. 3, "135"*), comprising: a digital audio transceiver (*Interface 116*) configured for sending and receiving compact disc (CD) quality streaming digital audio signals (*page 5, paragraph 82; CD quality signals inherent - page 2, paragraph 31*) over a digital audio bus (*illustrated in Fig. 5*) directly to another digital audio network station without transmission through an intermediate central hub (*page 5, paragraph 75*); a controller (*Fig. 6; operating system 204 and network communications interface 200*) for sending and receiving control signals over a control bus (*bus illustrated in Fig. 5; page 4, paragraph 63-64*); a processor (*Figs. 5 and 6; "102"*) in communication with the transceiver and controller for arbitrating transmission and reception of the CD quality streaming digital audio signals in response to control signals (*page 4, paragraph 67 and 70*); and wherein arbitrating further comprises: receiving a command on the control bus (*page 4, paragraph 70; control buttons 108A-D are used to initiate and reply to an audio/video broadcast...*); if the command comprises a system-wide broadcast command and there is no transmission on the digital audio bus, executing said system-wide broadcast command, or else timing out (*page 5, paragraphs 82-83*); and if the command comprises a station-specific command and there is no transmission on the digital audio bus, executing a handshake followed by the station-specific command, or else timing out (*page 5, paragraphs 74-75*).

Nakatani fails to explicitly disclose preventing streaming digital audio signal collisions from occurring on the digital audio bus and determining if the digital audio bus is in use or not.

However, Tomassetti preventing streaming digital audio signal collisions from occurring on the digital audio bus and determining if the digital audio bus is in use or not (*col. 11, lines 14-30*).

In view of this, it would have been obvious to one skilled in the art to modify Nakatani's system by preventing collisions, as taught by Tomassetti, so as to avoid loss of data during transmission on the bus.

Regarding claim 16, Nakatani teaches the digital audio network station according to claim 15, further comprising a switchable balancing network between the digital audio transceiver and the digital audio bus (*col. 9, line 61 to col. 10 line 25*).

Regarding claim 17, Nakatani teaches the digital audio network station according to claim 15, further comprising a switchable balancing network between the controller and the control bus (*col. 9, line 61 to col. 10 line 25*).

Regarding claim 18, Nakatani teaches the digital audio network station according to claim 15, further comprising an audio output connection from the digital audio transceiver for delivering CD quality digital audio signals to an audio output device (*Figs. 3 and 7, speaker 118*).

Regarding claim 19, Nakatani teaches the digital audio network station according to claim 18, wherein the audio output device comprises a speaker (*Figs. 3 and 7, speaker 118*).

Regarding claim 20, Nakatani teaches the digital audio network station according to claim 15, further comprising an audio input connection for connecting an external audio source providing CD quality digital audio signals to the digital audio transceiver for transmission over the digital audio bus (Fig. 3; manual input 108).

Regarding claim 21, Nakatani teaches the digital audio network station according to claim 15, further comprising a memory device in communication with the processor for storing computer instructions executable by the processor (memory 140; page 4, paragraph 55).

Regarding claims 22, 27 and 31, Nakatani teaches the digital audio network station according to claim 15, wherein the CD quality streaming digital audio signals are transmitted according to a standard.

Nakatani fails to explicitly disclose the standard as Dolby Digital TM or Digital Theater SystemsTM (DTS).

However, Tomassetti teaches streaming digital audio signals according to a digital theater system (col. 12, lines 17-33).

In view of this, it would have been obvious to one skilled in the art to modify Nakatani's system to include a digital theatre system, as taught by Tomassetti, in order to produce high quality audio.

Regarding claim 24, Nakatani teaches the digital audio network system of claim 23, wherein each of the digital audio network stations further comprises a memory device in communication with the processor for storing computer instructions executable by the processor (memory 140; page 5, paragraph 55).

Nakatani fails to explicitly disclose the computer instructions implementing a method of switching arbitration to prevent streaming digital audio signal collisions from occurring on the digital audio bus.

However, Tomassetti teaches instructions implementing a method of switching arbitration to prevent streaming digital audio signal collisions from occurring on the digital audio bus (col. 11, lines 14-30).

In view of this, it would have been obvious to one skilled in the art to modify Nakatani's system by preventing collisions, as taught by Tomassetti, so as to avoid loss of data during transmission on the bus.

Regarding claim 25, Nakatani teaches the digital audio network system of claim 23, wherein the digital audio bus comprises a signal transmission technology selected from the group consisting of: electrical, infra-red, ultrasonic, radio frequency and fiber optic technologies (page 2, paragraphs 31 and 35).

Regarding claim 26, Nakatani teaches the digital audio network system of claim 23, comprising a digital audio bus. Nakatani fails to explicitly teach a plurality of digital audio buses.

However, Tomassetti teaches the digital audio bus comprises a plurality of digital audio buses (col. 6, lines 26-37).

In view of this, it would have been obvious to one skilled in the art to include a plurality of audio buses, in order to transmit audio signals on multiple lines.

Regarding claim 28, Nakatani teaches the same limitations described above in the rejection of claim 15. Nakatani further teaches all the other digital audio network stations parsing the control packet (page 5, paragraph 88).

Regarding claim 29, Nakatani teaches the method according to claim 28, further comprising, if the control packet comprises a network station-specific command, and there is no transmission on the digital audio bus, executing a handshake and the network station-specific command, or else timing out (page 5, paragraphs 74-75).

Regarding claim 30, Nakatani teaches the method according to claim 29, wherein executing the handshake further comprises validating a response to ensure correct processing of the network station-specific command (page 5, paragraph 84).

Conclusion

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RHONDA MURPHY whose telephone number is (571)272-3185. The examiner can normally be reached on Monday - Friday 9:00 - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Rhonda Murphy
Examiner
Art Unit 2616

/FIRMIN BACKER/
Supervisory Patent Examiner, Art Unit 2616